IN THE CLAIMS

1. [currently amended] A method for transmission of data in an IP packet network which comprises a cluster of cluster units, a switching unit having a plurality of ports, the cluster units being connected to a part of the plurality of ports, which cluster units share a unicast IP address, said method comprising at least steps in which:

-the cluster units are configured to be members of an IP multicast group ~~specific to the cluster~~,

-the IGMP protocol is used to obtain information about to which ports of the plurality of ports the cluster units are connected,

-the MAC address of a received IP packet is checked, and if said MAC address is a multicast MAC address, the IP destination address of said packet is compared to the unicast IP address shared by the cluster units,

-if the IP destination address of said packet is the same as the unicast IP address, the packet is forwarded to those ports, to which the cluster units were found to be connected.

2. [original] The method of claim 1, further comprising at least steps, in which:

the switching unit receives an IGMP group membership report,

the switching unit checks, if said report is addressed to said IP multicast group specific to the cluster,

and if it is, the switching unit stores into its memory the identifier of the port, through which said report arrived.

3. [original] The method of claim 1, further comprising a step, in which an IGMP group membership query is sent by the switching unit.

4. [original] The method of claim 1, wherein the IGMP protocol is protocol version 1 according to RFC 1112.

5. [original] The method of claim 1, wherein the IGMP protocol is protocol version 2 according to RFC 2236.

6. [currently amended] Cluster system having a plurality of cluster units and a switching unit, said cluster units being associated with the same P unicast address, wherein the cluster units are configured to be members of an P multicast group ~~specific to the cluster system,~~ said cluster system comprising:

-means for observing using the IGMP protocol which ports of the switching unit are connected to the cluster units,

-means in the switching unit for observing the MAC destination address of a packet arriving to the switching unit and for checking if said MAC destination address is a MAC multicast address,

-means in the switching unit for observing the P destination address of said packet and for comparing said P destination address to said P unicast address associated with the cluster units,

-means in the switching unit for forwarding of the packet to those ports whose identifiers were previously stored to said memory means as a response to the finding that said P destination address and said P unicast address are the same and said MAC destination address is a MAC multicast address.

7. [original] The system according to claim 6, wherein said means for observing

using the IGMP protocol comprise at least:

-means in the switching unit for observing IGMP multicast group reports and for checking, if a received IGMP multicast group report is addressed to said IP multicast group specific to the cluster system, and

-means in the switching unit for storing into a memory means an identifier of that port via which said received IGMP multicast group report arrived as a response to finding that said report was addressed to said IP multicast group.

8. [original] The system according to claim 6, further comprising means in the switching unit for sending IGMP group membership queries.

9. [original] The system according to claim 6, wherein the cluster units are gateway units.

10. [original] The system according to claim 6, wherein the cluster units are server units.

11. [new] Method for transmission of data in an IP packet network, which comprises a cluster of cluster units, a switching unit having a plurality of ports, the cluster units being connected to a part of the plurality of ports, which cluster units share a unicast IP address, said method comprising at least steps, in which

-the cluster units are configured to be members of an IP multicast group,

-the IGMP protocol is used to obtain information about which ports of said plurality of ports of a switching unit to which said cluster units are connected,

-the MAC address of a received Ethernet frame containing an IP packet is

checked, and if said MAC address is the multicast MAC address shared by the cluster units, the frame is forwarded to those ports to which the cluster units were found to be connected.

12. [new] The method of claim 11, further comprising a step, in which an IGMP group membership query is sent by the switching unit.

13. [new] The method of claim 11, wherein the IGMP protocol is protocol version 1 according to RFC 1112.

14. [new] The method of claim 11, wherein the IGMP protocol is protocol version 2 according to RFC 2236.

15. [new] Cluster system having a plurality of cluster units and a switching unit, said cluster units being associated with the same IP unicast address, wherein the cluster units are configured to be members of an IP multicast group, said cluster system comprising

-means for observing, using the IGMP protocol, which ports of the switching unit are connected to said cluster units,

-means in the switching unit for observing the MAC destination address of a packet arriving at the switching unit and checking if said MAC destination address is a MAC multicast address,

-means in the switching unit for forwarding of the packet to those ports connected to the cluster units sharing a MAC multicast address.

16. [new] The system according to claim 15, wherein said means for observing using the IGMP protocol comprise at least

-means in said switching unit for observing IGMP multicast group, and

-means in said switching unit for storing into a memory an identifier of that port via which said received IGMP multicast group report arrived as a response to finding that said report was addressed to said P multicast group.

17. [new] The system according to claim 15, further comprising means in said switching unit for sending IGMP group membership queries.

18. [new] The system according to claim 15, wherein said cluster units are gateway units.

19. [new] The system according to claim 15, wherein said cluster units are server units.

20. [new] A switching unit for cluster system having a plurality of cluster units, said cluster units being associated with the same P unicast address and configured to be members of an P multicast group specific to the cluster system, wherein said switching unit is structured as follows:

said switching system has circuitry or a programmed machine to observe, using the IGMP protocol, which ports of the switching unit are connected to the cluster units,

the switching unit has circuitry or a programmed machine which observes the MAC destination address of a packet arriving at said switching unit and

checks if said MAC destination address is a MAC multicast address,

if so, the switching unit forwards the packet to those ports connected to the cluster units sharing a MAC multicast address.

21. [new] A switching unit for cluster system having a plurality of cluster units, said cluster units being associated with the same P unicast address and configured to be members of an P multicast group specific to the cluster system, wherein said switching unit is structured as follows:

the switching unit includes a plurality of ports,

said switching system includes a memory storing identifiers of those ports which, using an IGMP protocol, are determined to be connected to the cluster units,

the switching unit has circuitry and/or a programmed machine to observe the MAC destination address of a packet arriving at the switching unit and check if said MAC destination address is a MAC multicast address,

if so, the switching unit forwards the packet to those ports connected to the cluster units sharing a MAC multicast address.

22. [new] A switching unit for cluster system having a plurality of cluster units, said cluster units being associated with the same P unicast address and configured to be members of an P multicast group specific to the cluster system, wherein said switching unit is structured as follows:

the switching unit includes a plurality of ports,

said switching system includes a memory storing identifiers of those ports which, based on an IGMP multicast group reports received, are determined to be